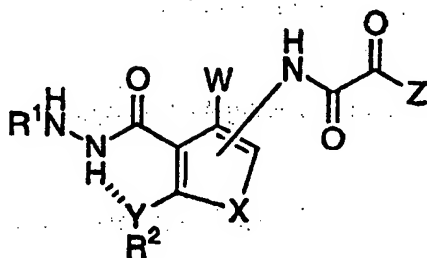


This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended) A composition of matter comprising a compound having have the general formula :



wherein,

R^1 = H, acyl or alkyl or aryl with up to 20 carbon atoms, which may be straight or branched, cyclic or acyclic, chiral or achiral, or an amino acid or peptide;

R^2 = H, alkyl or aryl with up to 20 carbon atoms, which may be straight or branched, cyclic or acyclic, chiral or achiral;

W = H, F or the NH-CO-CO-Z group shown: $[[,]]$

X = O, S, NR^3 , $CR^4=N$, $N=CR^4$, $CR^4=CR^5$;

R^3 is H, acyl or alkyl or aryl with up to 20 carbon atoms, ~~which may be straight or branched, cyclic or acyclic, chiral or achiral;~~

R^4 and R^5 are each selected from H, alkyl, halogen, nitro, carboxyl, amino, alkyl or aryl sulfone, alkyl or aryl sulfoxide, sulfonic acid, sulfonate salt or sulfonamide, and wherein R^4 and R^5 may be combined to form a ring structure;

Y = O, S, or YR^2 as a group may be a halogen;

Z = OR^6 or NR^7R^8 , wherein R^6 , R^7 and R^8 are each selected from H, acyl, alkyl or aryl with up to 20 carbon atoms, which may

be straight or branched, cyclic or acyclic, chiral or achiral, or an amino acid or peptide.

Claim 2 (Withdrawn) A peptide incorporating composition according to Claim 1.

Claim 3 (Withdrawn) A peptide incorporating composition according to Claim 1, wherein the composition induces the peptide to fold into β -sheets.

Claim 4 (Withdrawn) A protein incorporating a composition according to Claim 1.

Claim 5 (Withdrawn) A peptidomimetic compound incorporating a composition according to Claim 1.

Claim 6 (Withdrawn) A composition according to Claim 1 combined with an agent to cause that agent to mimic β -strands.

Claim 7 (Withdrawn) A compound according to Claim 1 combined with an agent to cause that agent to block β -sheet dimerization of proteins.

Claim 8 (Withdrawn) A compound according to Claim 1 combined with an agent to cause that agent to block protein-protein β -sheet interactions.

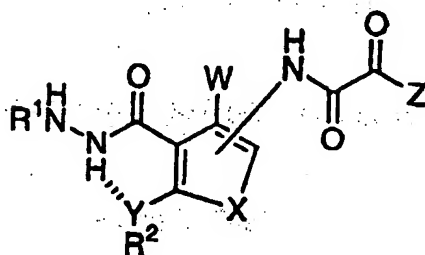
Claim 9 (Withdrawn) A compound according to Claim 1 combined with an agent to cause that agent to interact with a protein by β -sheet formation.

Claim 10 (Currently Amended) A ~~tripeptide compound~~ composition of matter according to Claim 1 wherein the compound comprises ~~comprising~~ *i*-PrCO-Phe-Hao-Val-NHBu.

Claim 11 (Currently Amended) A preparation comprising a composition of matter according to Claim 1 in a pharmaceutically acceptable carrier.

Claim 12 (Withdrawn) A method of causing dimerization of a compound that is capable of dimerizing due to β -sheet interactions, said method comprising the step of:

combining the compound with a chemical entity having the general formula A:



wherein;

R^1 = H, acyl or alkyl or aryl with up to 20 carbon atoms, which may be straight or branched, cyclic or acyclic, chiral or achiral, or an amino acid or peptide;

R^2 = H, alkyl or aryl with up to 20 carbon atoms, which may be straight or branched, cyclic or acyclic, chiral or achiral;

W = H, F or the NH-CO-CO-Z group shown;

X = O, S, NR^3 , $CR^4=N$, $N=CR^4$, $CR^4=CR^5$;

R^3 is H, acyl or alkyl or aryl with up to 20 carbon atoms, which may be straight or branched, cyclic or acyclic, chiral or achiral;

R^4 and R^5 are each selected from H, alkyl, halogen, nitro, carboxyl, amino, alkyl or aryl sulfone, alkyl or aryl sulfoxide, sulfonic acid, sulfonate salt or sulfonamide, and wherein R^4 and R^5 may be combined to form a ring structure;

Y = O, S, or YR^2 as a group may be a halogen;

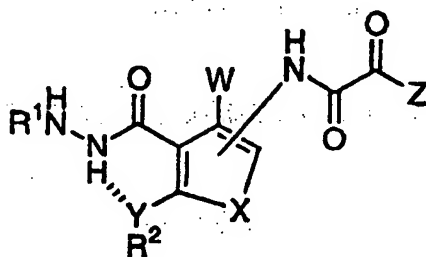
Z = OR^6 or NR^7R^8 , wherein R^6 , R^7 and R^8 are each selected from H, acyl, alkyl or aryl with up to 20 carbon atoms, which may be straight or branched, cyclic or acyclic, chiral or achiral, or an amino acid or peptide.

Claim 13 (Withdrawn) A method according to Claim 9 wherein the compound is a peptide.

Claim 14 (Withdrawn) A method according to Claim 9 wherein the compound is a protein.

Claim 15 (Withdrawn) A method according to Claim 9 wherein the compound is a peptidomimetic compound.

Claim 16 (Withdrawn) A method of treating a disease or disorder in a human or animal patient, said method comprising the step of administering to the patient a therapeutically effective amount of a compound having the formula:



wherein;

R¹ = H, acyl or alkyl or aryl with up to 20 carbon atoms, which may be straight or branched, cyclic or acyclic, chiral or achiral, or an amino acid or peptide;

R² = H, alkyl or aryl with up to 20 carbon atoms, which may be straight or branched, cyclic or acyclic, chiral or achiral;

W = H, F or the NH-CO-CO-Z group shown,

X = O, S, NR³, CR⁴=N, N=CR⁴, CR⁴=CR⁵;

R^3 is H, acyl or alkyl or aryl with up to 20 carbon atoms, which may be straight or branched, cyclic or acyclic, chiral or achiral;

R^4 and R^5 are each selected from H, alkyl, halogen, nitro, carboxyl, amino, alkyl or aryl sulfone, alkyl or aryl sulfoxide, sulfonic acid, sulfonate salt or sulfonamide, and wherein R^4 and R^5 may be combined to form a ring structure;

$Y = O, S,$ or YR^2 as a group may be a halogen;

$Z = OR^6$ or NR^7R^8 , wherein R^6, R^7 and R^8 are each selected from H, acyl, alkyl or aryl with up to 20 carbon atoms, which may be straight or branched, cyclic or acyclic, chiral or achiral, or an amino acid or peptide,

or a pharmaceutically acceptable salt thereof.

Claim 17 (Withdrawn) A method according to Claim 13 wherein the disease or disorder being treated is a cancer and the compound comprises a compound that mimic β -sheet which binds with a Ras oncoprotein.

Claim 18 (Withdrawn) A method according to Claim 13 wherein the disease or disorder being treated is cancer and the compound comprises a compound that mimic β -sheet which binds to the Ras-binding domain of serine/kinase c-Raf1 (Raf).

Claim 19 (Withdrawn) A method according to Claim 13 wherein the disease or disorder being treated is a neurodegenerative disease wherein proteins form oligomeric aggregates and wherein the compound comprises a compound that mimic β -sheet which disrupts the formation of such oligomeric aggregates.

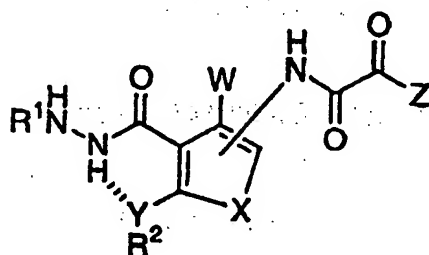
Claim 20 (Withdrawn) A method according to Claim 16 wherein the compound comprises a compound that mimic β -sheet that mimics polyglutamine β -sheet aggregates.

Claim 21 (Withdrawn) A method according to Claim 16 wherein the disease or disorder is Huntington's Disease.

Claim 22 (Withdrawn) A method according to Claim 13 wherein the disease or disorder is Alzheimer's Disease and wherein the compound comprises a compound that mimic β -sheet which binds to β -amyaloid aggregates and block β -amyaloid fibril growth.

Claim 23 (Withdrawn) A method for identifying compounds which participate in β -sheet interaction with a protein, the method comprises the steps of:

a) providing a protein, a test compound, and a compound which mimics β -sheets which comprise a compound having the general formula:



wherein;

R^1 = H, acyl or alkyl or aryl with up to 20 carbon atoms, which may be straight or branched, cyclic or acyclic, chiral or achiral, or an amino acid or peptide;

R^2 = H, alkyl or aryl with up to 20 carbon atoms, which may be straight or branched, cyclic or acyclic, chiral or achiral;

W = H, F or the NH-CO-CO-Z group shown,

X = O, S, NR^3 , $CR^4=N$, $N=CR^4$, $CR^4=CR^5$;

R^3 is H, acyl or alkyl or aryl with up to 20 carbon atoms, which may be straight or branched, cyclic or acyclic, chiral or achiral;

R^4 and R^5 are each selected from H, alkyl, halogen, nitro, carboxyl, amino, alkyl or aryl sulfone, alkyl or aryl sulfoxide, sulfonic acid, sulfonate salt or sulfonamide, and wherein R^4 and R^5 may be combined to form a ring structure;

$Y = O, S,$ or YR^2 as a group may be a halogen;

$Z = OR^6$ or NR^7R^8 , wherein R^6, R^7 and R^8 are each selected from H, acyl, alkyl or aryl with up to 20 carbon atoms, which may be straight or branched, cyclic or acyclic, chiral or achiral, or an amino acid or peptide;

- b) non-covalently bond the protein to the compound which mimics β -sheets which comprise a compound having the general formula A to form a complex;
- c) contact the test compound with the complex; and
- d) determine the decomplexation of the complex.

Claim 24 (Withdrawn) A method according to Claim 23 wherein the step of non-covalently bonding the protein is performed by ii) immobilizing the protein and ii) contacting the immobilized protein with the compound which mimics β -sheets.

Claim 25 (Withdrawn) A method according to Claim 23 wherein step of contacting the test compound is performed by admixing a solution containing the test compound with a solution containing the complex.

Claim 26 (Withdrawn) A method according to Claim 23 wherein step of determining the decomplexation is a quantitative determination.

Claim 27 (Withdrawn) In a peptide synthesis wherein amino acids are added sequentially to a growing peptide chain, a method of attaching one amino acid to another amino acid or peptide chain, said method comprising the step of:

(A) attaching to the *N* terminus of the amino acid to be added a protecting group comprising Fmoc*;

(B) causing the amino acid to form a peptide linkage with the other amino acid or peptide chain such that the protecting group that had been attached to the amino acid in Step A is at the *N* terminus of the growing peptide chain.

Claim 28 (Withdrawn) A method according to Claim 27 further comprising the steps of:

(C) detaching said protecting group from the *N* terminus of the growing peptide chain.

Claim 29 (Withdrawn) A method according to Claim 28 further comprising the step of:

(D) attaching to the end terminus of another amino acid a protecting group comprising Fmoc*;

and,

(E) causing the amino acid of Step D to form a peptide linkage with the *N* terminus of the peptide chain such that the protecting group that had been attached to the amino acid in Step D is at the *N* terminus of the growing peptide chain.

Claim 30 (Withdrawn) An *NB*terminally protected amino acid having the formula:

P-AA

wherein AA is an amino acid and P is Fmoc*

Claim 31 (Withdrawn) An *NB*terminally protected peptide having the formula:

P-(AA)_n

wherein AA is an amino acid, P is Fmoc* and n is 2 or more.